

IN THE CLAIMS:

Please amend the claims, as follows.

Claim 1 (currently amended): A procedure for the production by blowing and cold box curing of an exothermic sleeve for foundry moulds which comprises:

(A) introducing, by blowing, in the space defined ~~between the~~ by a sleeve mould and two cores, a mixture for the production of an exothermic sleeve; ~~obtaining to obtain an uncured sleeve[([,])that is formed as a single piece and having an opening open-at both [its]] ends, [[the]]one opening of the mouth~~ having an internal double chamfer, whilst the other opening is normally flat, ~~in which~~ said mixture for the production of exothermic sleeves comprises:

a. a fluoride-free composition for the production of sleeves which comprises:

a.1) an insulating or refractory material;

a.2) an exothermic mixture based on an oxidizable metal, an oxidizing agent capable of producing an exothermic reaction and magnesium as initiator element of the reaction;

b. a binding agent for cold box curing;

(B) putting the uncured sleeve prepared in (A) with a catalyst for curing said uncured sleeve;

(C) leaving the sleeve resulting from (B) to be cured;

(D) removing the cured sleeve from the mould, the sleeve having an inner surface adapted to contact molten material to be supplied to foundry moulds; and

(E) locating a plug in the ~~orifice of the base~~ opening opposite the mouth of the sleeve the end with the internal double chamfer.

Claim 2 (previously presented): A procedure according to claim 1, wherein said insulating material with refractory properties (a.1) is aluminium silicate in the form of hollow microspheres.

Claim 3 (currently amended): A procedure according to claim 1, wherein said oxidizable metal is aluminium, or ~~preferably~~ a mixture of fine and coarse aluminium powder ~~of this metal~~.

Claim 4 (previously presented): A procedure according to claim 1, wherein said oxidizing agent is selected from the group consisting of salts of alkaline metals, salts of alkaline earths, metallic oxides, and mixtures thereof.

Claim 5 (previously presented): A procedure according to claim 1, wherein said oxidizing agent is selected of the group consisting of nitrates, chlorates of alkaline metals, permanganates of alkaline metals, chlorates of alkaline earths, permanganates of alkaline earths, iron oxide, manganese oxide, and mixtures thereof.

Claim 6 (previously presented): A procedure according to claim 1, wherein said exothermic material (a.2) is in non-fibrous form, that is, in blowable form.

Claim 7 (previously presented): A procedure according to claim 1, wherein said cold box curing binding agent is selected from the group consisting of phenol resins, phenol-urethane resins, acrylic resins, alkaline phenol resins, and resins of silicates.

Claim 8 (currently amended): A procedure according to [[claim]] claim 1, wherein said cold box curing binding agent is selected from the group consisting of acrylic resins activated by SO₂ (gas) and phenol-urethane resins activated by amine (gas).

Claim 9 (currently amended): A procedure according to claim 1, wherein, in [[stage]step (B), the uncured sleeve prepared in [[stage]]step (A) is put in contact with a catalyst in the gaseous phase suitable for curing said sleeve.

Claim 10 (currently amended): A procedure according to claim 1, wherein said catalyst for curing the uncured sleeve is a catalyst in the gaseous phase selected from among the group consisting of: a gaseous amine to activate phenol-urethane resins; SO₂(gas) to activate acrylic resins; CO₂ (gas) or methyl formate (gas) to activate alkaline phenol resins; and CO₂ (gas) to activate sodium silicate resins.

Claim 11 (currently amended): A procedure according to claim 1, wherein the cured sleeve comprises on one end an opening for supplying molten material to a cast piece as the cast piece contracts, said opening comprising a double chamfer part adapted to provide a rut or slot in a deadhead, thereby facilitating to facilitate the removal of the deadhead from the cast piece, and the opening at[[on]] the other end an orifice of the sleeve is closed with a plug of plastic, wood, sawdust, sand or the material forming the sleeve.

Claim 12 (previously presented): A procedure according to claim 4, wherein said oxidizing agent is selected of the group consisting of nitrates, chlorates of alkaline metals,

permanganates of alkaline metals, chlorates of alkaline earths, permanganates of alkaline earths, iron oxide, manganese oxide, and mixtures thereof.